



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

D5770-5

Job Sheet 208152



Part No: D5770-5

Job Qty: 12 pcs

Part Name: Hoop



Part Weight: 0 lbs

Job Created: 3/12/20

Due Date: 3/23/20

Type: Stock

POSITIVE RECALL

EFFECTIVE 2012/12 AUTH SAJ

Status: New

RELEASED

DATE

Priority: Medium

Job Tracking No:

Created By: Jennifer Renwick

Description:

Note: URF 20-522 DWG 5770 REV.A IPP REV:A NEW ISSUE 20.01.14 JV VERF:DD

Ship Via:

Bill of Materials

Job Routing

| Op No | Operation | Qty | Start Date | Due Date | Standard Setup Run Hrs Hrs | Workcenter/Supplier | | Sign-off |
|-------|---------------------------|--------|------------|----------|-------------------------------|--------------------------|-----------|----------|
| | | | | | | Workcenter / Supplier | Lead Time | |
| 100 | Large Fab - Welded Assy-1 | 12 pcs | 3/23/20 | 3/23/20 | 0.00 4.00 | Large Fab - 1 | | |
| | | | | | | Large Fab - 10 | | |
| | | | | | | Large Fab - 2 | | |
| | | | | | | Large Fab - 3 | | |
| | | | | | | Large Fab - 4 | | |
| | | | | | | Large Fab - 5 | | |
| | | | | | | Large Fab - 6 | | |
| | | | | | | Large Fab - 7 | | |
| | | | | | | Large Fab - 8 | | |
| | | | | | | Large Fab - 9 | | |
| | | | | | | Large Fab - 11 (Various) | | |
| | | | | | | Large Fab - 12 | | |
| 110 | QC 5 | 12 pcs | 3/23/20 | 3/23/20 | 0.00 0.00 | QC 5 - 10 | | |
| | | | | | | QC 5 - 12 | | |
| | | | | | | QC 5 - 17 | | |
| | | | | | | QC 5 - 18 | | |
| | | | | | | QC 5 - 19 | | |
| | | | | | | QC 5 - 22 | | |
| | | | | | | QC 5 - 24 | | |
| | | | | | | QC 5 - 3 | | |
| | | | | | | QC 5 - 43 | | |
| | | | | | | QC 5 - 49 | | |
| | | | | | | QC 5 - 51 | | |
| | | | | | | QC 5 - 58 | | |
| | | | | | | QC 5 - 68 | | |
| | | | | | | QC 5 - 9 | | |
| | | | | | | QC 5 - 50 | | |
| | | | | | | QC 5 - 30 | | |
| | | | | | | QC 5 - 40 | | |
| | | | | | | QC 5 - 61 | | |
| | | | | | | QC 5 - 81 | | |



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL.: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Container No: S264445



Part: D5770-5

Job No: 208152

Serial No/Batch: S264445

Revision: REV.A

Inspector:

Exp Date:

Instructions:

Date: 03/18/20



Plex 3/12/20 8:55 AM Dart.Renwick.Jennifer

| | | | | |
|----------------------------------------|---------|-----------|------------------------|----------------|
| 120 Packaging 3-1 - Stock - B4B 12 pcs | 3/23/20 | 0.00 0.00 | Packaging 3 - 1 - B4B | |
| | | | Packaging 3 - 2 - B4B | |
| | | | Packaging 3 - 3 - B4B | |
| | | | Packaging 3 - 4 - B4B | |
| | | | Packaging 3 - 5 - B4B | |
| | | | Packaging 3 - 6 - B4B | |
| | | | Packaging 3 - 7 - B4B | |
| | | | Packaging 3 - 8 - B4B | |
| | | | Packaging 3 - 9 - B4B | |
| | | | Packaging 3 - 10 - B4B | |
| | | | Packaging 3 - 11 - B4B | MFL |
| | | | Packaging 3 - 12 - B4B | |
| | | | Packaging 3 - 13 - B4B | |
| | | | Packaging 3 - 14 - B4B | |
| | | | Packaging 3 - 15 - B4B | |
| | | | Packaging 3 - 16 - B4B | |
| | | | Packaging 3 - 17 - B4B | |
| | | | Packaging 3 - 18 - B4B | |
| | | | Packaging 3 - 19 - B4B | |
| | | | Packaging 3 - 20 - B4B | |
| | | | Packaging 3 - 21 - B4B | |
| | | | Packaging 3 - 22 - B4B | |
| | | | Packaging 3 - 23 - B4B | |
| | | | Packaging 3 - 24 - B4B | |
| | | | Packaging 3 - 25 - B4B | |
| | | | Packaging 3 - 26 - B4B | |
| | | | Packaging 3 - 27 - B4B | |
| | | | Packaging 3 - 28 - B4B | |
| | | | Packaging 3 - 29 - B4B | |
| | | | Packaging 3 - 30 - B4B | |
| | | | Packaging 3 - 31 - B4B | |
| | | | Packaging 3 - 32 - B4B | |
| | | | Packaging 3 - 33 - B4B | |
| | | | Packaging 3 - 34 - B4B | |
| | | | Packaging 3 - 35 - B4B | |
| | | | Packaging 3 - 36 - B4B | |
| | | | Packaging 3 - 37 - B4B | |
| 130 QC 21 - SA 12 pcs | 3/23/20 | 0.00 0.00 | QC 21 - SA - 21 | 21 MAR 25 2020 |
| | | | QC 21 - SA - 76 | 76 |
| | | | QC 21 - SA - 53 | 53 |

Part Op 100 - 1- Cut material to 50" 2- Trace line at 12.375" and 27.9375". 3- Bend, first bend at 101 degrees and second bend at 24 degrees. 4- Cut ends to length using DT-106687 5- Remove markings on tube 6- Deburr

119 - (QC5- Inspect part completeness to step on W/O)

120 - Identify as per dwg & Stock Location: _____ See note 6.

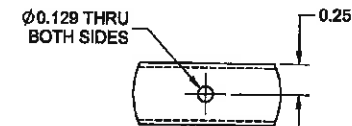
130 - QC21- Final Inspection - Work Order Release

| Job BOM | | | | |
|--------------------|--------------------------------------|-----------------------|-------------------------------|-----------|
| Part / Item | Component Name | Quantity | Operation | Container |
| M4130NTS0.500W.035 | 4130 Square Tube .500 X .500 X .035W | 49.9920 ft (4.166 ea) | 100-Large Fab - Welded Assy-1 | 5260577 |

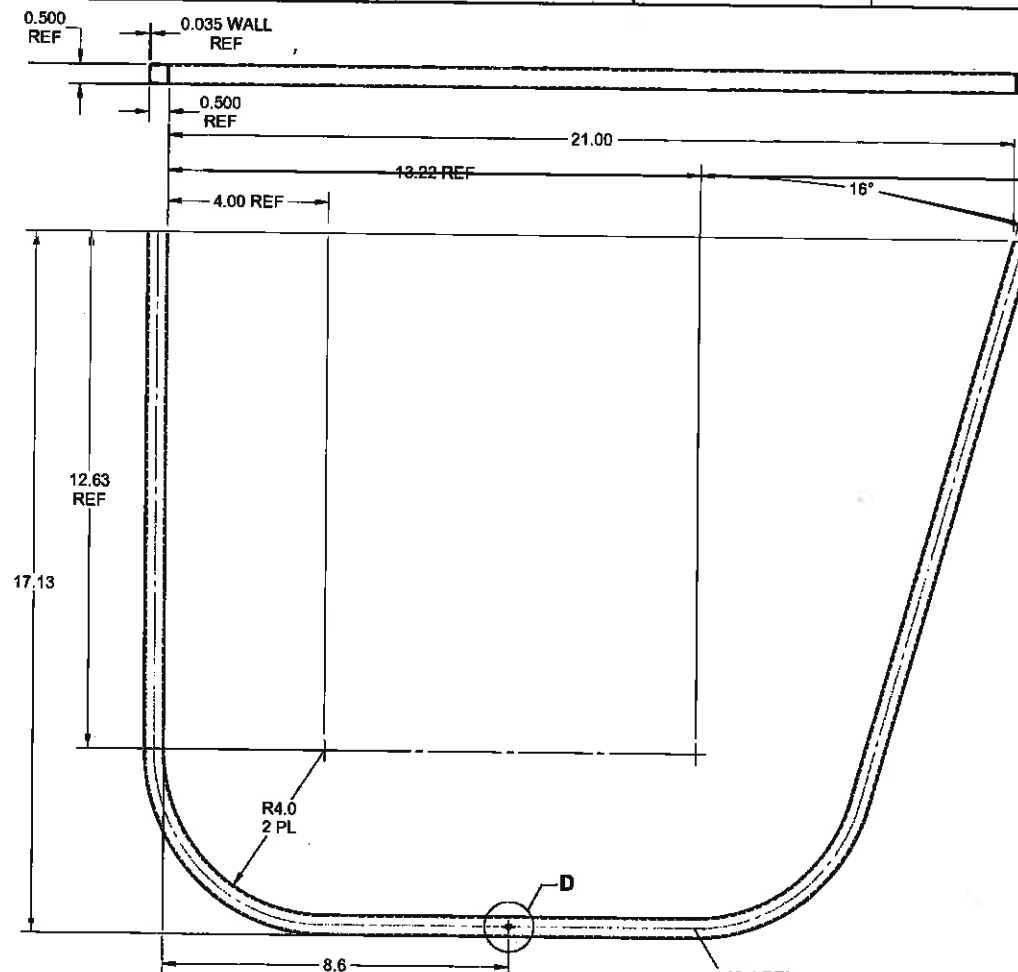
| Job Allocations | | | | |
|-------------------------------|--------------------|----------|-----------|-----------|
| Operation | Component Part | Required | Inventory | Allocated |
| 100-Large Fab - Welded Assy-1 | M4130NTS0.500W.035 | 50 | 577 | 0 |

| Part Specifications | |
|------------------------------------|--|
| Specifications could not be found. | |

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 208152



DETAIL D
SCALE 3X



D5770-5 HOOP
(DERIVED FROM AERO DESIGN P/N 76421-01)

RELEASED
2020 FEB 18/NO

UNDER REVIEW

URF 2020-522 20.02.14 (NO)

NOTES:

- 1) MATERIAL: AISI 4130N STEEL SQUARE TUBING, 1/2 X 0.035 WALL
PER MIL-T-6736 OR AMS 6371/6370/6361/6362/6373/6374
REF DART SPEC M4130N-TS0.500W.035
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010
- 6) IDENTIFICATION: IDENTIFY PER DART QSI 044
- 7) WEIGHT: 0.85 lbs

APPROVED

| | | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|----------------------------------------|--------------|
| DESIGN | ZF | DART AEROSPACE LTD | |
| DRAWN | ZF | HAWKESBURY, ONTARIO, CANADA | |
| CHECKED | KPT | DRAWING NO. | REV. A |
| MFG. APPR. | DD | D5770 | SHEET 6 OF 7 |
| APPROVED | NO | TITLE | SCALE |
| DE APPR. | CP | BASKET HOOPS | NTS |
| DATE | 20.01.09 | COPYRIGHT © 2020 BY DART AEROSPACE LTD | |
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Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER **POHB045883**



Supplier: FAC001-VU
Factory Steel
14020 Oakland Ave.
Detroit, MI 48203 USA
Phone: 313 883 6300
Fax: 313 883 4883

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

PO No: POHB045883

PO Date: 2/18/20

Due Date: 2/28/20

Purchase Order

Revision:

Revision Date:

Issued By: Lavoie, Chantal
Phone: 613-623-5200 Ext: 242
Fax: 613-632-1053
clavoie@dartaero.com

Via: Ground

Pynt Terms: Net 30

Freight Terms:

Special Comments:

FEB 19 2020

| Items | | | | | | | | | | | | | |
|-----------|-----|--------------------|---------|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|---------|----------|----------------|-------------------|---------|-------------------------|----------------|
| Line Item | Job | Part | Drawing | Supplier Part No | Description | Status | Account | Due Date | Order Quantity | Received Quantity | Balance | Unit Price (USD) | Extended Price |
| 1 | | M4130NTS0.500W.035 | | | 4130 Square Tube .500 X .500 X .035W : MATERIAL: AISI 4130N STEEL TUBING AS PER MIL-T-6736 OR AMS 6371/6360/6361/6362 6373/6374 receive ft | Firmed | - | 2/28/20 | 600 ft | 0 ft | 600 ft | \$6.49/ft | \$3,894.00 |
| | | | | | | | | | | | | Grand Total: \$3,894.00 | |

611A
603

MAR 06 2020

Order Notes

Procurement Quality Clauses

A005 right of entry

A012 chemical and physical test report

A016 personnel qualification

A017 raw material identification (as applicable). No Raw Metals from China or Soviet Bloc Countries. (DFARS)

A026 certification of material conformance

A041 quality management system

A042 dart notification by supplier

A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program.

A049 supplier awareness.

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 2/19/20 2:52 PM Dart.Lavoie, Chantal

PACKING LIST

No. 67811

PG 1 OF 1

| | | | | | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|---------------------------------|----------------------------------------------------------------------------|--|----------------------------------------------------------------------|--|
| FACTORY STEEL & METAL SUPPLY 14020 OAKLAND AVENUE DETROIT, MI 48203 (313)883-6300 PHONE (313)883-4883 FAX SOLD TO DART AEROSPACE 1270 ABERDEEN STREET HAWKESBURY, ON K6A 1K7 | CUSTOMER PO POHB045883 CUSTOMER JOB | | BUYER CHANTEL LAVOIE Tel (613) 632-3336 Fax (613) 632-4443 | | SHIP DATE 02/21/2020 SHIP VIA *****TRUCK***** | |
| | SALES ORDER 60752 | ORDER DATE 02/19/2020 | SALES REP MICK HALON | | RESALE # 59-2958719 | |
| | SHIP TO DART AEROSPACE 1270 ABERDEEN STREET HAWKESBURY, ON K6A 1K7 | | SHIP INST CALL WHEN READY PRO# | | CARRIER TRUCK BLIND Y/N N | |
| | | | TERMS NET 30 DAYS | | FOB DETROIT | |

| LINE | QUANTITY | DESCRIPTION | WIDTH | LENGTH | WEIGHT |
|------|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|--------------|---------|
| 1 | 611.667 FT | PACK IN CARDBOARD TUBE 4130N CD SMLSS SQ TUBE 1/2" X .035W MILT-6736 Tag Mill Ref # Heat 154506 023914 25537 WTRS (CIRCLE) FAX SHIPMENT INVOICE ALL DATE: _____ INITIAL: _____ | | 21' / 24' RL | 135.361 |
| | | | Pcs Length | Feet | Weight |
| | | | 27 21' / 24' RL | 611.667 | 135.361 |

| | | | | | | | |
|---------------------|--|-------------------------|--|----------------------------|--|---------------|--|
| TOTAL WT 135 LBS | | RECEIVED BY - SIGNATURE | | RECEIVED BY - PRINTED NAME | | DATE RECEIVED | |
|---------------------|--|-------------------------|--|----------------------------|--|---------------|--|

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M4130 VTSO.520 W.035 PO / BATCH NO.: P0418045803
 DATE: MAR 04 2020 5260577

MATERIAL CERT REC'D: YES
 QUANTITY RECEIVED: 611 FT
 QUANTITY INSPECTED: 611 FT
 QUANTITY REJECTED: 0

THICKNESS ORDERED: .500 X .500 W.035
 THICKNESS RECEIVED: .500 X .520 W.035
 SHEET SIZE ORDERED: —
 SHEET SIZE RECEIVED: —

| DESCRIPTION | NCR (Check Y/N) | COMMENTS |
|----------------------------------------------------|---------------------------------------|------------|
| SURFACE DAMAGE | Y <input checked="" type="checkbox"/> | |
| CORRECT FINISH | <input checked="" type="checkbox"/> N | |
| CORROSION | Y <input checked="" type="checkbox"/> | |
| CORRECT GRAIN DIRECTION | <input checked="" type="checkbox"/> N | |
| CORRECT MATERIAL PER M-DRAWING | <input checked="" type="checkbox"/> N | MIL-T-6736 |
| CORRECT THICKNESS | <input checked="" type="checkbox"/> N | |
| PHOTO REQUIRED | Y <input checked="" type="checkbox"/> | |
| CORRECT REF # TO LINK CERT | <input checked="" type="checkbox"/> N | HIT 25537 |
| CORRECT MATERIAL IDENTIFICATION | <input checked="" type="checkbox"/> N | |
| CORRECT M# ON THE MATERIAL | <input checked="" type="checkbox"/> N | |
| DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF | Y <input checked="" type="checkbox"/> | |
| DOES THIS REQUIRE AN EXTRUSION REPORT | Y <input checked="" type="checkbox"/> | |

| CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW | | | | | |
|------------------------------------------------------------------------------------|-----|-----|-------|-------|---------|
| | HRC | HRB | DUR A | DUR D | WEBSTER |
| TYPE OF MATERIAL | | | | | |
| SIZE OF TEST SAMPLE | | | | | |
| HARDNESS / DUROMETER READING | | | | | |

testers located in the Quality Office

| | | | |
|----------------------------------|----------------------|-----------------------------------|--|
| QC 18 INSPECTION | | ENGINEERING SIGNOFF (if required) | |
| INSPECTED BY: <u>MAR 04 2020</u> | SIGNED OFF BY: _____ | | |
| DATE: _____ | DATE: _____ | | |

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

LIME1

POMB045883

M4130NTS0.500W.035



| | | | |
|------------------------|-------------------------|---------------------------------------------------|------------------------|
| DESIGN DH | DRAWN BY DH | DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA | |
| CHECKED [Signature] | APPROVED [Signature] | DRAWING NO. M4130N-TS | REV. A SHEET 1 OF 1 |
| DATE 05.02.09 | | TITLE 4130N SQUARE TUBING | SCALE NTS |
| A | 05.02.09 | NEW ISSUE | |

PURCHASE MATERIAL:

AISI4130N STEEL SQUARE TUBING PER ONE OF
THE FOLLOWING SPEC'S: MIL-T-6736, AMS 6371,
6360, 6361, 6362, 6373 OR 6374

PART NUMBER:

M4130N-TS | A.AAA | W | .TTT |

DAS
92
-SB

WHERE A.AAA = WIDTH IN INCHES
TTT = WALL THICKNESS IN INCHES

EXAMPLE: 0.50" X 0.035" WALL = M4130N-TS0.500W.035

RELEASED
05.02.09

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PLYMOUTH TUBE CO.

1208 East 12th Street, St. Louis, Illinois 63104
Phone: (314) 673-1916 Fax: (314) 672-7340

TRUST YOUR SOURCE ACCEPT OUR QUALITY ASSURANCE

PRODUCT CERTIFICATION

SALES ORDER - LINE / RLS

179567 - 1 / 0

SHIP TO

Factory Steel & Metal Supply C
14020 Oakland Avenue
Detroit, MI 48203
USA

WORK ORDER 023914

HEAT NUMBER 25537

MELT SOURCE Tamen Steel - Melt/Mfg. USA

PCS/HEAT 0

| CUSTOMER P.O. | CUSTOMER PART | QUANTITY | LADING NO | CERT ID / REV | CERT DATE |
|---------------|---------------|----------|-----------|---------------|-----------|
| 3999 | SQ-N12035 | | | | |

PART DESCRIPTION SHSQ0500035J200

**** Square OD ****
Side1: 0.5000 Max:0.5100 Min:0.4900
Side2: 0.5000 Max:0.5100 Min:0.4900
Wall: 0.0350 Max:0.0380 Min:0.0320
Length: 10.00.26.00
Spec: MIL-T 6736B S. Seamless Aircraft
Grade: 430
Anneal: Cond N

DAS
82
9-89

CERTIFICATION REQUIREMENTS

FAR BAA (FAR 52.225-1 Buy America Act Supplies), DFARS 252.225-7001 By America Act & Bal. of Payments Program FAR TAA (FAR 52.225-6 Trade Agreements) Paragraph 1.4.5 This material was tested and conforms to the requirements of ASTM A-450. The Grain size is determined and reported by the raw material supplier in accordance to ASTM E-112. This raw material was magnetic particle inspected by the raw material supplier in accordance to AMS 2640J and/or ASTM E-1444, and rated as Frequency, and Severity to AMS 2301, latest revision. Yield is determined by using the 0.2% offset method. Additional Specifications - AMS-T 6736B, 6360P & 6371L. Material produced in accordance to ASTM A-519-17. Jominy results: J(5/16")=38 J(8/16")=31.

Chemical Analysis

| C | Mn | P | S | Si | Al | Cr | Mo | Ni | Pb | Cu | V | Ti | Sn |
|-----|-----|------|------|-----|------|------|-----|-----|------|-----|------|------|------|
| .30 | .56 | .008 | .005 | .29 | .025 | 1.02 | .20 | .13 | .000 | .18 | .009 | .003 | .009 |

Physical Properties

| Freq. | Severity | Grain Size |
|-------|----------|------------|
| .000 | .000 | 7 |

Mechanical Properties

| TEST | UNITS | TESTS | HIGH | LOW | AVERAGE | STD-DEV |
|--------------------|---------------|-------|--------|--------|---------|---------|
| Tensile | Psi | 6 | 121110 | 115340 | 118173 | 2536 |
| Yield | Psi | 6 | 115370 | 109700 | 112525 | 2436 |
| Elongation | % | 6 | 17 | 17 | 17 | 0 |
| Rockwell C | Rc | 6 | 22 | 22 | 22 | 0 |
| TEST | RESULT | | | | | |
| Decarb/OD | Pass | | | | | |
| Total ID/OD decarb | Pass | | | | | |

I certify that the results are a true and correct copy of the records prepared and maintained by Plymouth Tube Company, Streater in compliance with the requirements of the cited specification. Chemistry is as reported by the Steel supplier. This test report cannot be reproduced or distributed except in full without the written permission of Plymouth Tube.

Janine Demasch
Quality Assurance



PLYMOUTH TUBE CO.

1200 East 12th Street, Streator, Illinois 61364

Phone: (815) 673-1515 Fax: (815) 672-7343

PLEASE DO NOT ACCEPT NO SUBSTITUTIONS!



PRODUCT CERTIFICATION

SALES ORDER - LINE / RLS

179667-1 / 0-

SHIP TO

Factory Steel & Metal Supply C
14020 Oakland Avenue
Detroit, MI 48203
USA

WORK ORDER 023914

HEAT NUMBER 25537

PCS/HEAT 0

MELT SOURCE Tinklen Steel - Melt/Mfg. USA

| CUSTOMER P.O. | CUSTOMER PART | QUANTITY | LOADING NO | CERT ID / REV | CERT DATE |
|---------------|---------------|----------|------------|---------------|-----------|
| 3999 | SQ-N12035 | | | / | |

| PART DESCRIPTION | SHSQ0500035J200 |
|------------------|-----------------|
|------------------|-----------------|

Additional Specification(s)

| TEST | UNITS | #TESTS | HIGH | LOW | AVERAGE | STD-DEV |
|---------|---------|--------|------|-----|---------|---------|
| Brinell | Brinell | 3 | 251 | 197 | 225 | 27 |

This test report data is for the heat Chemistry Stated above.

The material in this test report is:

- 1) Drawn in the USA
- 2) Free from Polybrominated Biphenyls (PBB), Polybrominated Diphenyl Ethers (PBDE), and Mercury contamination.
- 3) NAFTA compliant.

End of Certification

DAS
82
9-89

I certify that the results are a true and correct copy of the records prepared and maintained by Plymouth Tube Company, Streator in compliance with the requirements of the cited specification. Chemistry is as reported by the Steel supplier. This test report cannot be reproduced or distributed except in full without the written permission of Plymouth Tube.

Janice Derossett
Quality Assurance

Entered: _____ Date: _____



WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. _____

Route update only ☐

| | | | | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|------------------------|--|
| Job: _____ Part No. _____ | DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> | DEPARTMENT/PROCESS <div style="display: flex; justify-content: space-between;"> <div> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Large Fab <input type="checkbox"/> </div> <div> Cross tube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> </div> <div> Eng. (Non-AW) <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> </div> <div> Engineering <input type="checkbox"/> Water Jet <input type="checkbox"/> Supplier <input type="checkbox"/> Quality <input type="checkbox"/> </div> </div> | | | |
| Date : | Sequence #: | QTY Affected : | | MRB (QSI042) | |
| Description Work Order Deviation | | Disposition | | Completed By | |
| | | | | Lead hand / Supervisor | |
| | | | | | |
| | | | | | |
| Root Cause <div style="display: flex; justify-content: space-between;"> <div> Operator <input type="checkbox"/> Manufacturing Process <input type="checkbox"/> Equip/Tooling <input type="checkbox"/> Handling/Presservation <input type="checkbox"/> Material <input type="checkbox"/> Product Improvement <input type="checkbox"/> Process Improvement <input type="checkbox"/> Human Factors <input type="checkbox"/> </div> <div> Pressure/Forced <input type="checkbox"/> Bending <input type="checkbox"/> Crushing <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave/Twist <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Mislabeled <input type="checkbox"/> </div> <div> Contamination <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Incomplete/Unclear Instructions <input type="checkbox"/> Drill Holes <input type="checkbox"/> Fit/Function <input type="checkbox"/> </div> <div> Power Loss/Surge <input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain Direction <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Off-set/Set-up <input type="checkbox"/> </div> <div> Positioned Wrong <input type="checkbox"/> Outside Tolerance <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Misread <input type="checkbox"/> </div> </div> | | FAULT CATEGORY <div style="display: flex; justify-content: space-between;"> <div> Operator <input type="checkbox"/> Manufacturing Process <input type="checkbox"/> Equip/Tooling <input type="checkbox"/> Handling/Presservation <input type="checkbox"/> Material <input type="checkbox"/> Product Improvement <input type="checkbox"/> Process Improvement <input type="checkbox"/> Human Factors <input type="checkbox"/> </div> <div> Pressure/Forced <input type="checkbox"/> Bending <input type="checkbox"/> Crushing <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave/Twist <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Mislabeled <input type="checkbox"/> </div> <div> Contamination <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Incomplete/Unclear Instructions <input type="checkbox"/> Drill Holes <input type="checkbox"/> Fit/Function <input type="checkbox"/> </div> <div> Power Loss/Surge <input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain Direction <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Off-set/Set-up <input type="checkbox"/> </div> <div> Positioned Wrong <input type="checkbox"/> Outside Tolerance <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Misread <input type="checkbox"/> </div> </div> | | | |
| Other/Details: <div style="height: 100px;"></div> | | | | | |